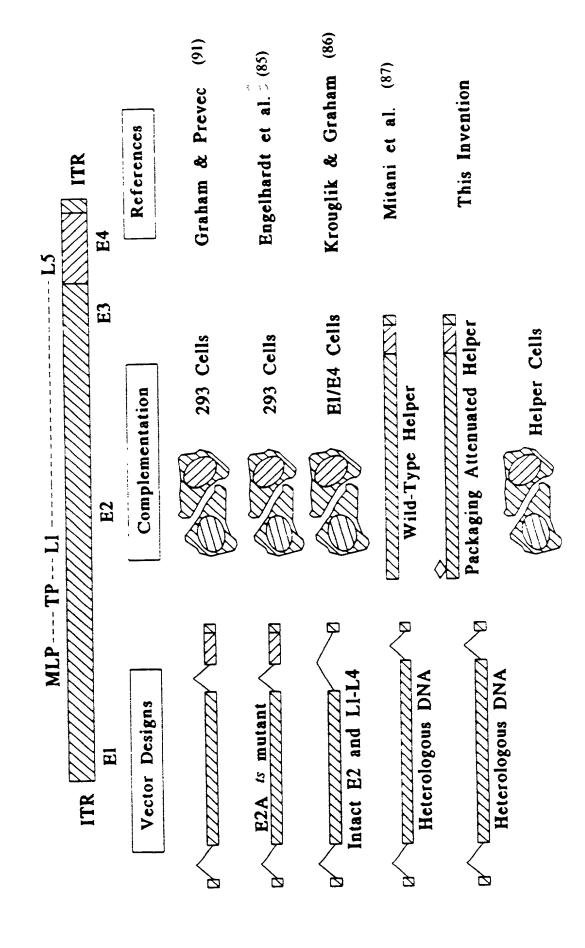
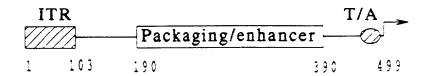


FIGURE 2



#### FIG. 3A



#### FIG. 3B

E 2 P Ela Core ElA Core GTGTACACAG GAAGTGACAA TTTTCGCGCG GTTTTAGGCG GATGTTGTAG CACATGTGTC CTTCACTGTT ANARGCGCGC CAAAATCCGC CTACAACATC 200 210 220 A II TAAATTTGGG CGTAACCGAG TAAGATTTGG CCATITICGC GGGAAAACTG ATTTAAACCC GCATTGGCTC ATTCTAAACC GGTAAAAGCG CCCTTTTGAC 290 276 280 350 260 Bia Core A III A IV AATAAGAGGA AGTGAAATCT GAATAATTTT GTGTTACTCA TAGCGCGTAA TTATTCTCCT TCACTTTAGA CTTATTAAAA CACAATGAGT ATCGCGCATT 340 300 330 310 320 A VI A VII A V TATTTGTCTA GGGCCGCGGG GACTTTGACC GTTTACGTGG AGACTCGAAA ATAAACAGAT CCCGGCGCCC CTGAAACTGG CAAATGCACC TCTGAGCGGG 370 380 390 360 350

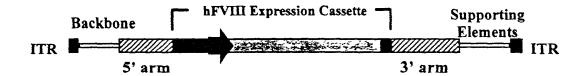
#### FIG. 3C

A repeat I 5'-GTANATITG-3'
A repeat II GTANGANTITG
A repeat IV ATANTITG
A repeat V GTANATITG
A repeat VI GGGACTITG
A repeat VII GACCGTITA

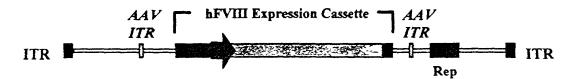
CONSENSUS: 5'-GT-N 3.4 TTTG-3'

#### FIGURE 3D

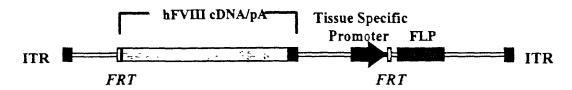
#### **Product Design for MiniAdFVIII**



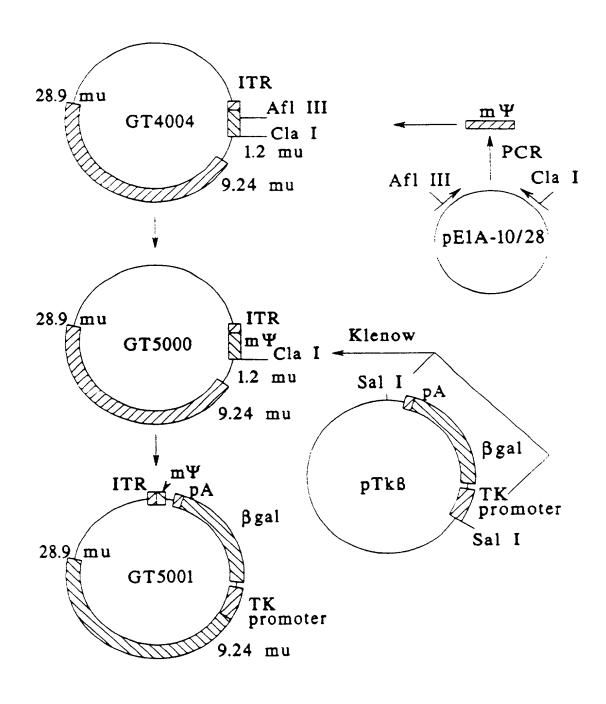
Version 1: Genomic Sequence Device



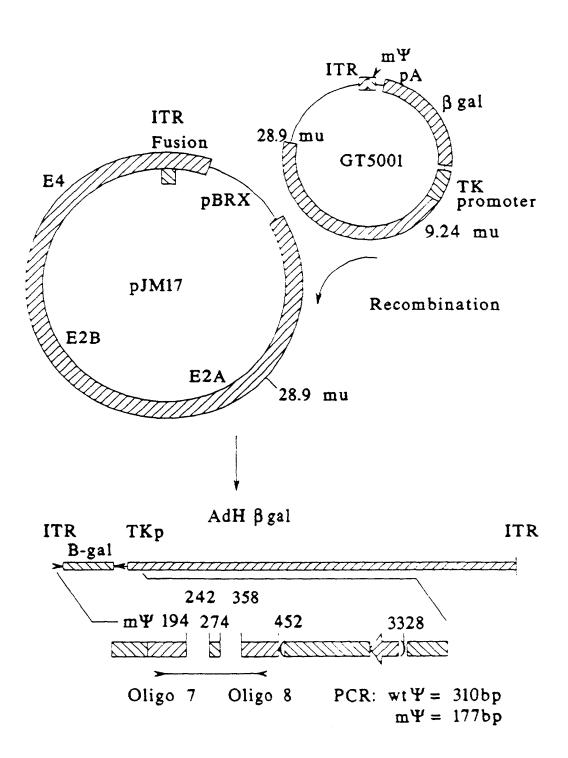
Version 2: AAV/ITR Integration Device



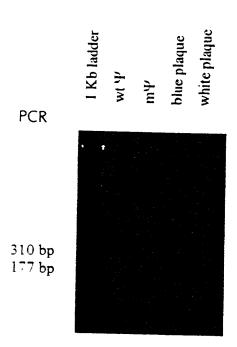
Version 3: Episomal Device

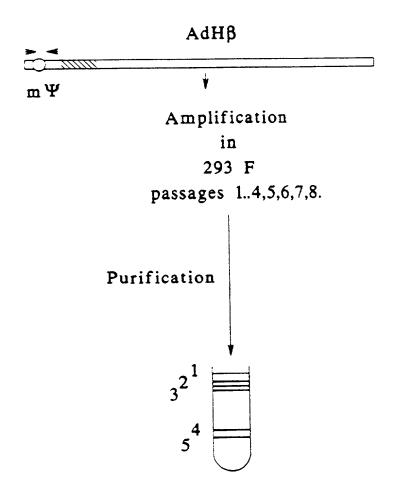


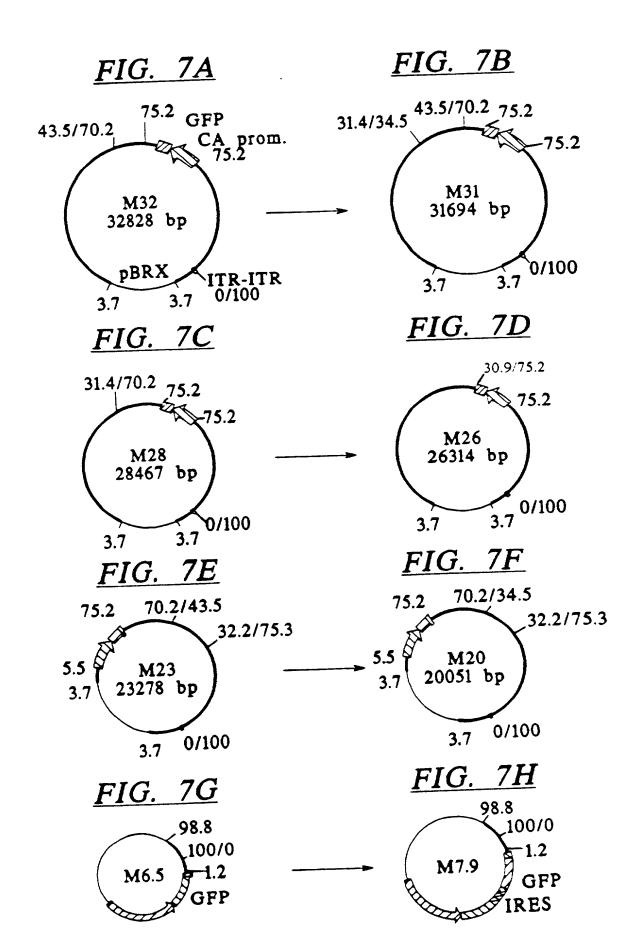
#### FIGURE 5A

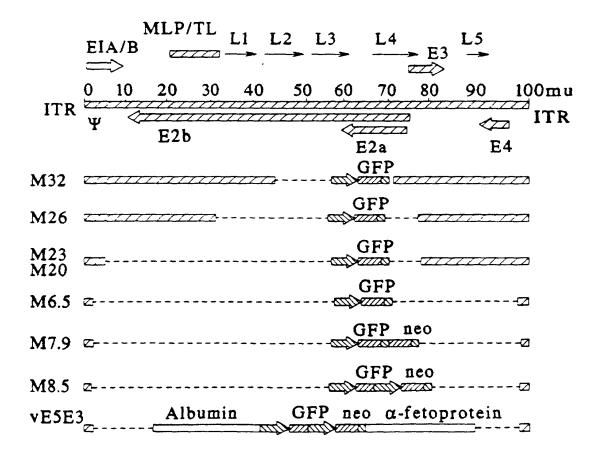


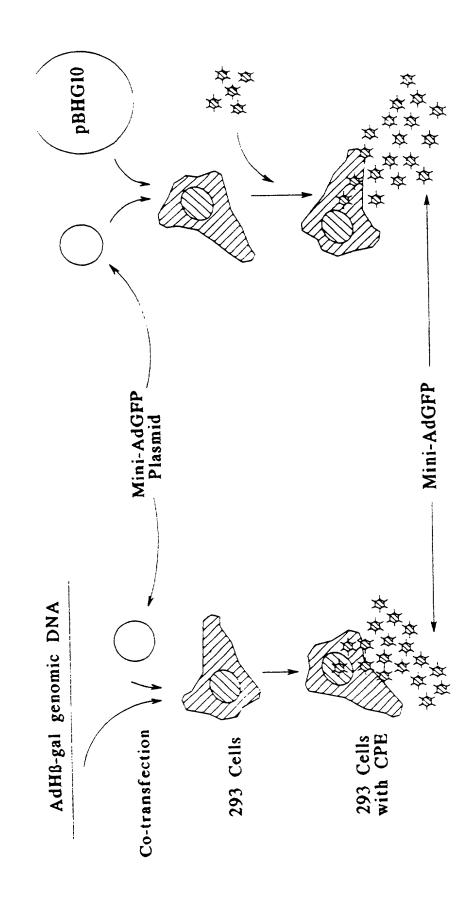
#### FIGURE 5B

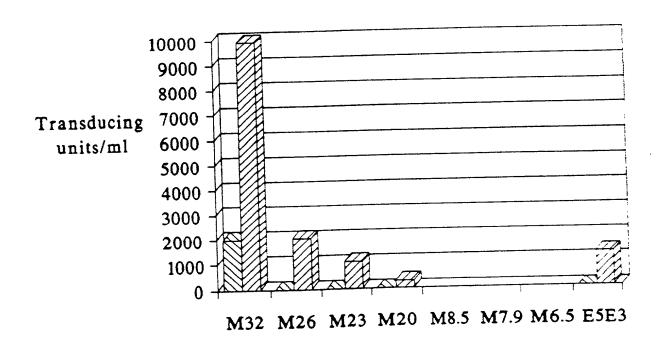


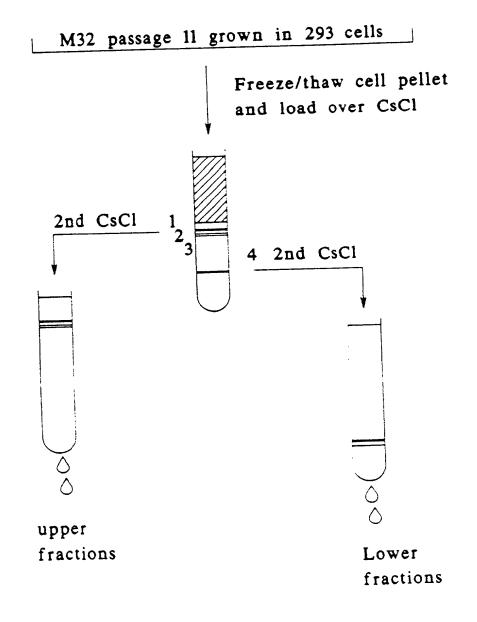




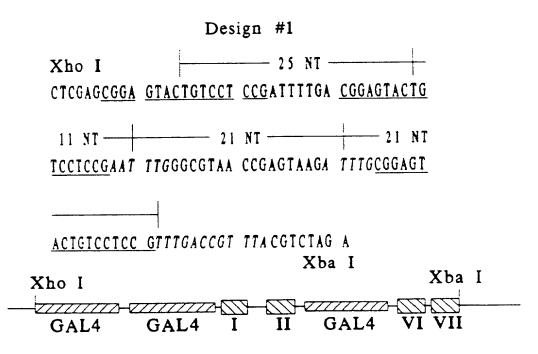


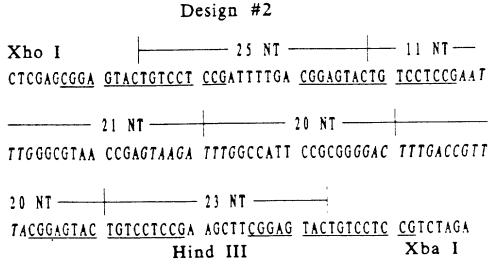






Ad5 Pac Modification with GAL4 Binding Sites

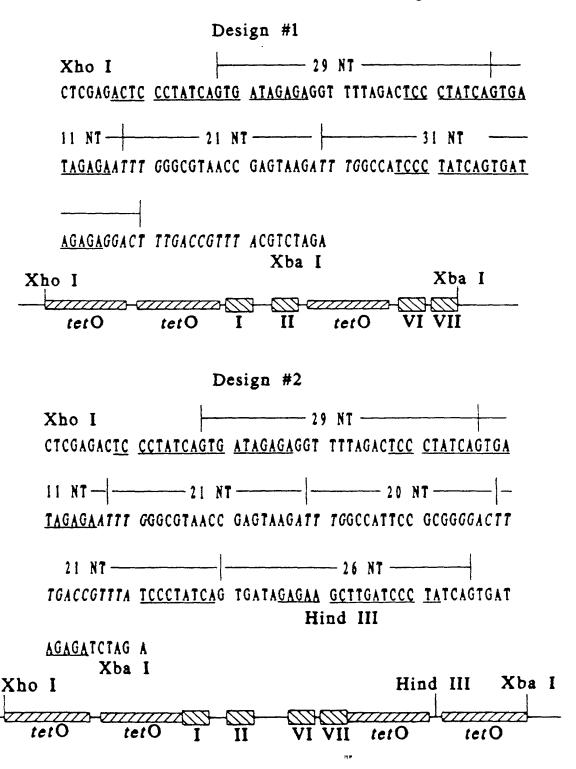


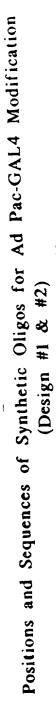


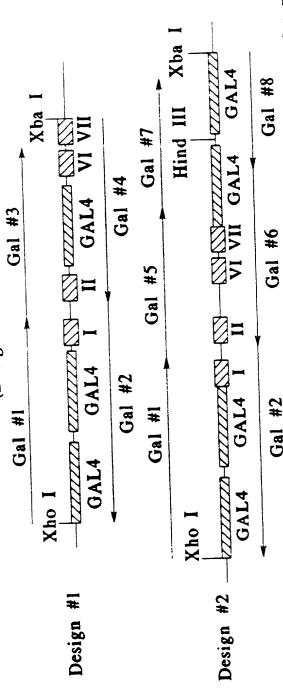
Xho I Hind III Xba I
GAL4 GAL4 I II VI VII GAL4 GAL4

And the first of t

#### Ad5 Pac Modification with tetO Binding Sites



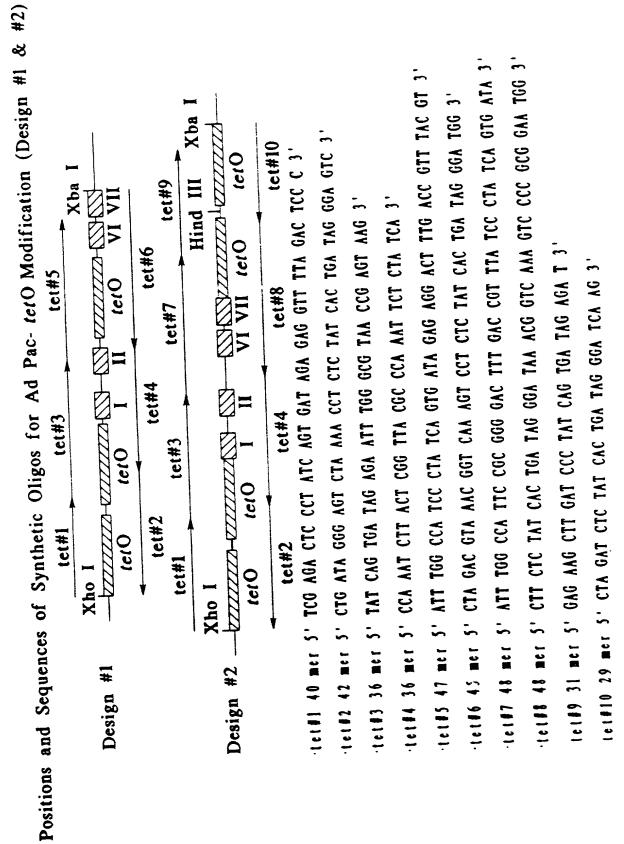




Galf3 54 mer 5' 666 CGT AAC CGA GTA AGA TTT GCG GAG TAC TGT CCT CCG TTT GAC CGT TTA CGT 3' Gal#2 53 mer 5' acg ccc aaa ttc gga gga cag tac tcc gtc aaa atc gga gga cag tac tcc gc 3' GAI#4 52 mer 5' CTA GAC GTA AAC GGT CAA ACG GAG GAC AGT ACT CCG CAA ATC TTA CTC GGT T 3' GAIFISI DE S' TCG AGC GGA GTA CTG TCC TCC GAT TTT GAC GGA GTA CTG TCC TCC GAA TTT 3' Gal#7 49 mer 5' ACC GTT TAC GGA GTA CTG TCC TCC GAA GCT TCG GAG TAC TGT CCT CCG T 3' Gal#8 47 mer 5' CTA GAC GGA GGA CAG TAC TCC GAA GCT TCG GAG GAC AGT ACT CCG TA 3' Gal#s 45 mer 5' GGG CGT AAC CGA GTA AGA TTT GGC CAT TCC GCG GGG ACT TTG 3' Galf 6 42 mer 5' AAC GGT CAA AGT CCC CGC GGA ATG GCC AAA TCT TAC TCG GTT 3'

# 

# FIGURE 15

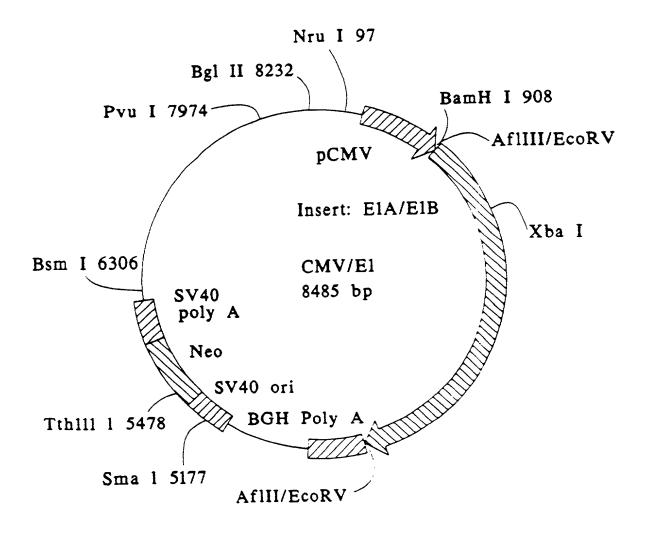


males and Miller or disc.

Minister constitution

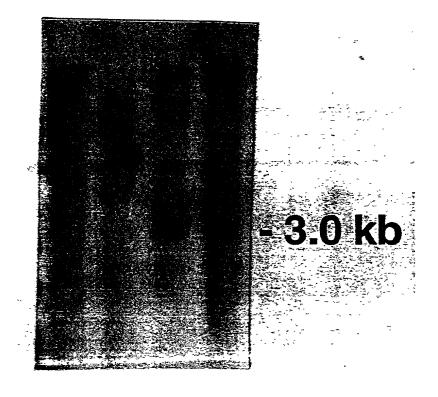
and Minister of the College Co

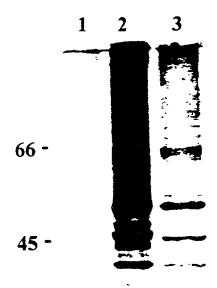
#### FIGURE 16



18 | 14 | 17

### 1 2 3 4





29 -

FIGURE 19

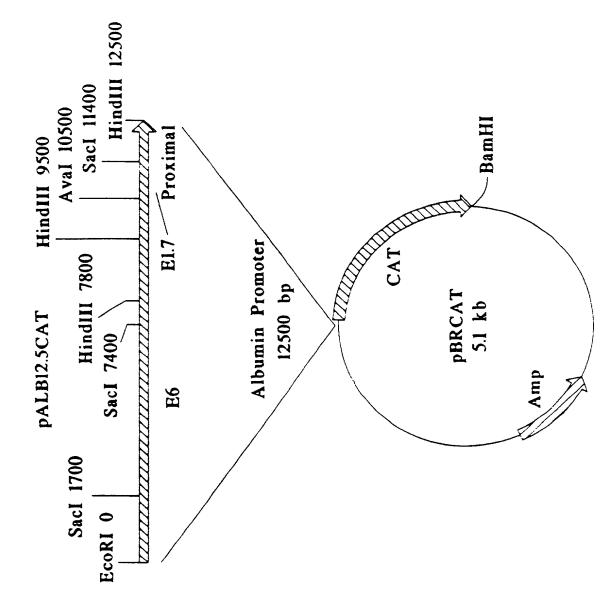
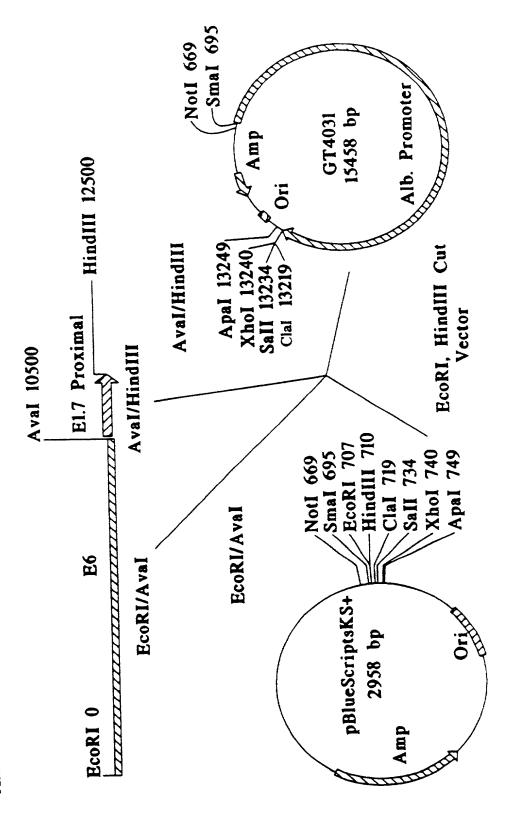
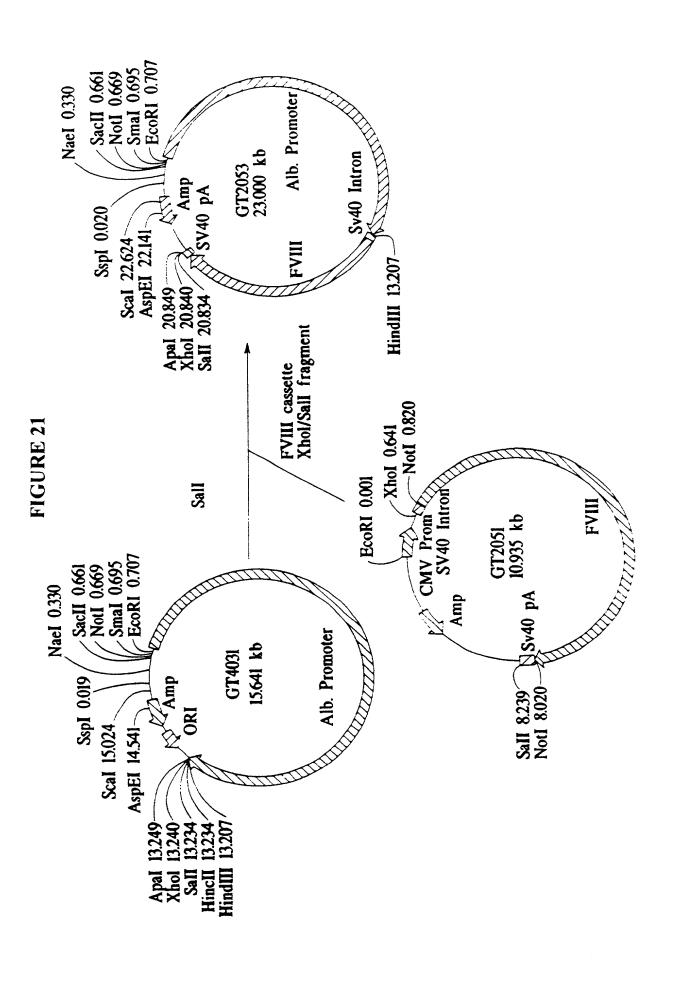
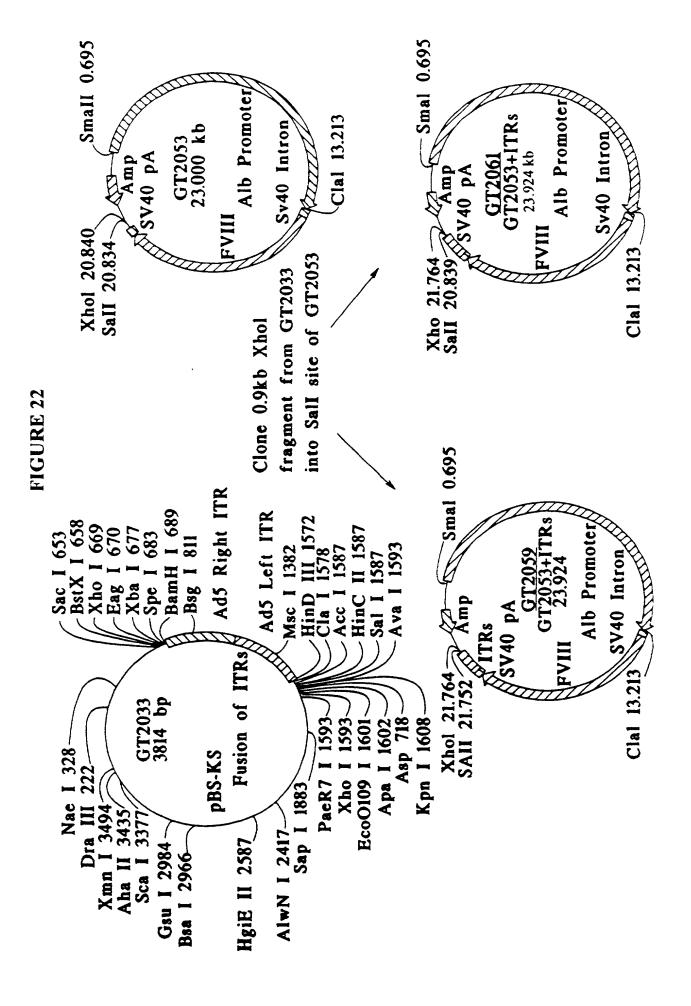


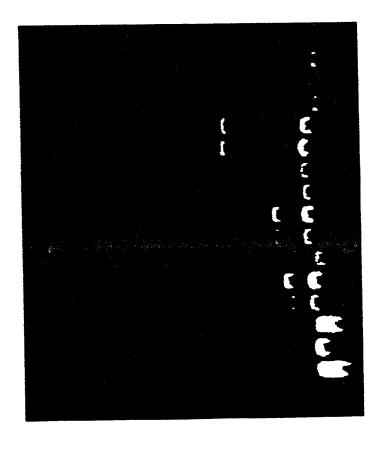
FIGURE 20

Albumin 12.5 kb Promoter Fragments









1 Kb DNA Marker GT2053 GT2061 GT2059

GT2053 BamHI GT2061 BamHI

GT2059 BamHI

GT2053 Xba1

GT2061 Xbal

GT2059 Xbal GT2053 ClaI

GT2061 ClaI

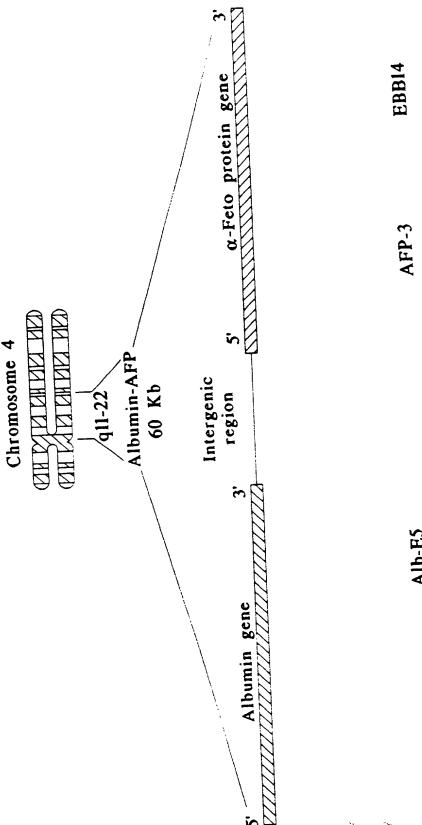
GT2059 ClaI

GT2053 XhoI + SalI

GT2061 XhoI + SalI

GT2059 XhoI + SalI 1Kb DNA marker

FIGURE 24



Alb-E5

FIGURE 25

Smal 0.695

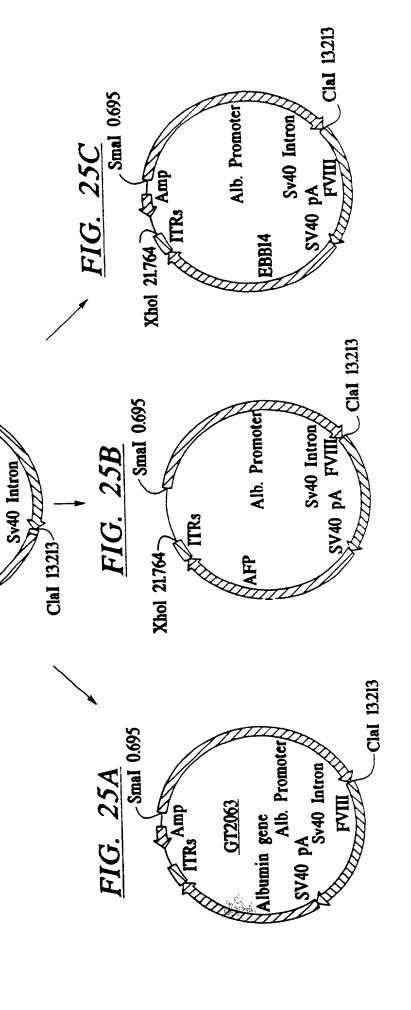
Alb Promoter,

GT2061 GT2053+TTRs 24.000 kb

TTRS SV40 pA

SaII 20.839

Xhol 21.7647



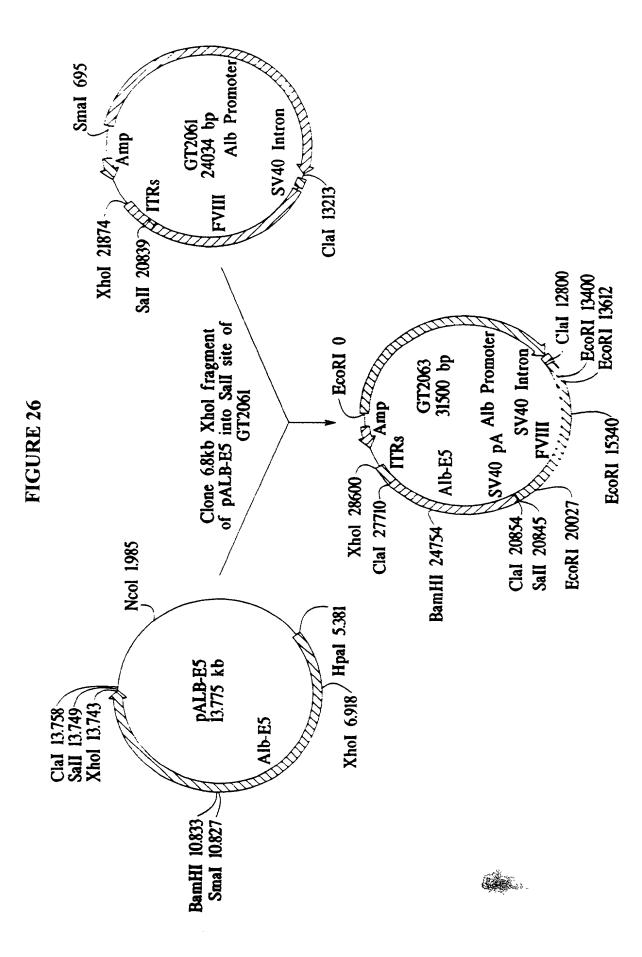
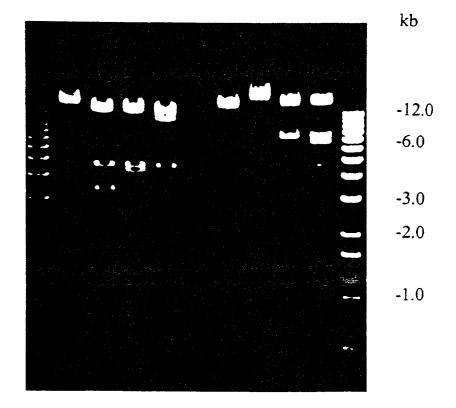


FIGURE 27

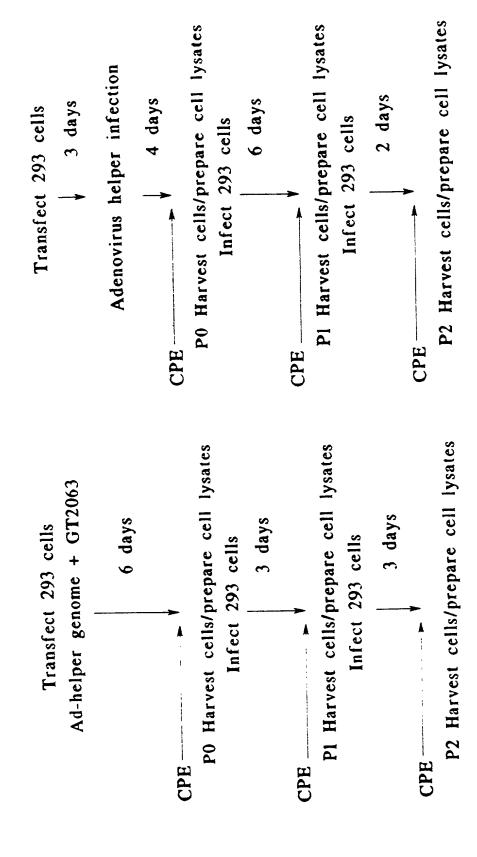
EcoR1				Cla1			
GT 4031	GT 2053	GT 2061	GT 2063	GT 4031	GT 2053	GT 2061	GT 2063

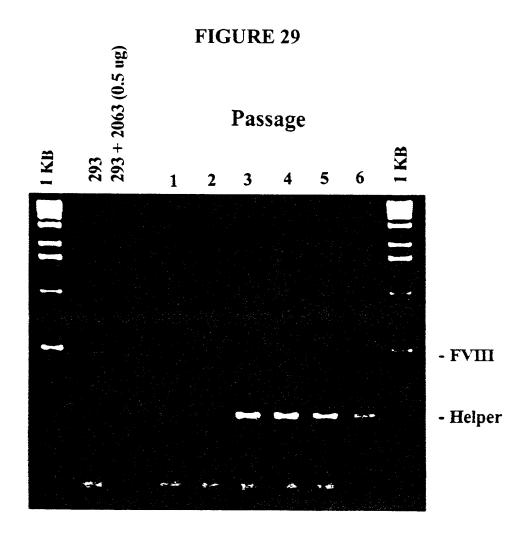


=

# FIG. 28A

FIG. 28B





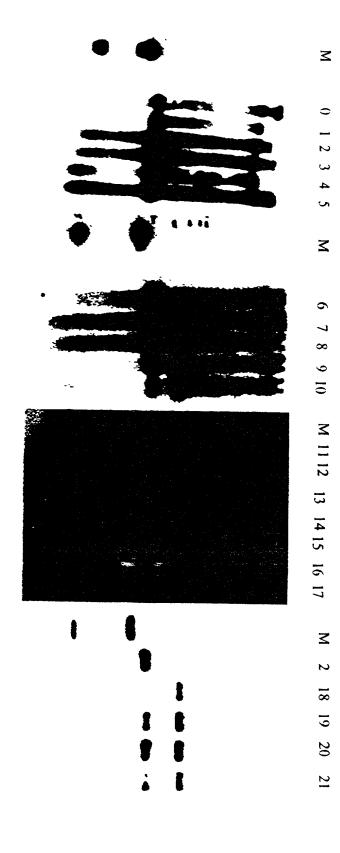
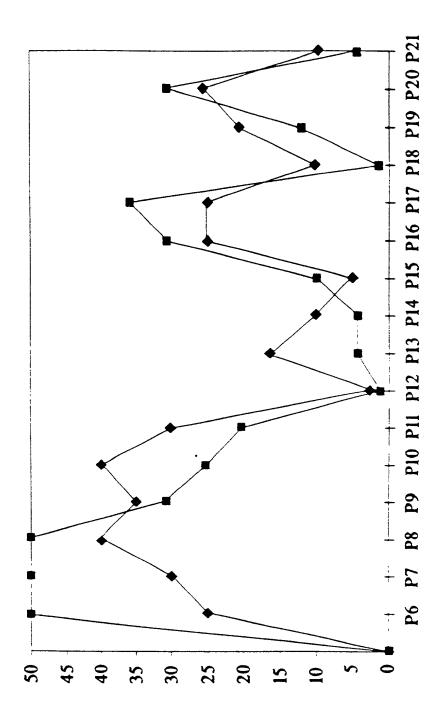
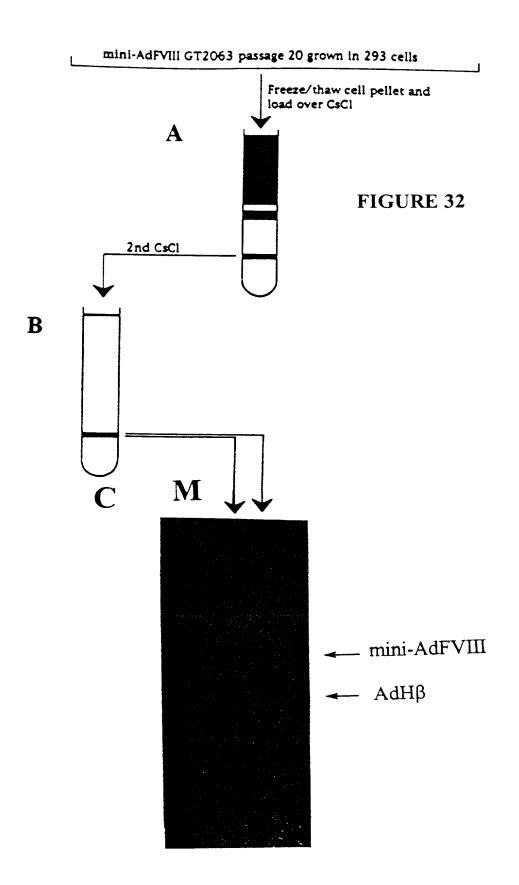


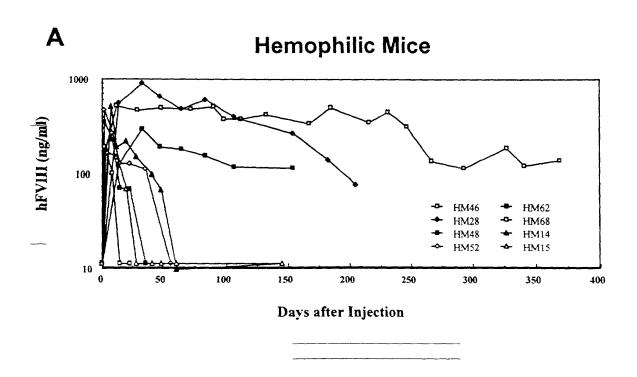
FIGURE 31

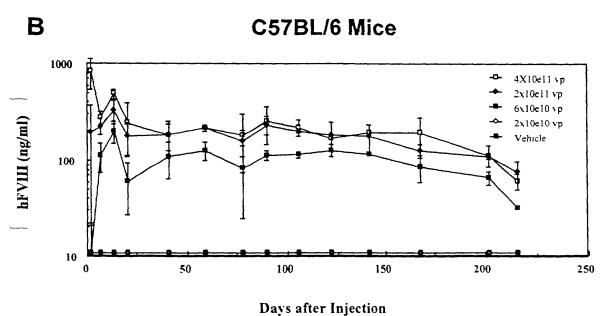


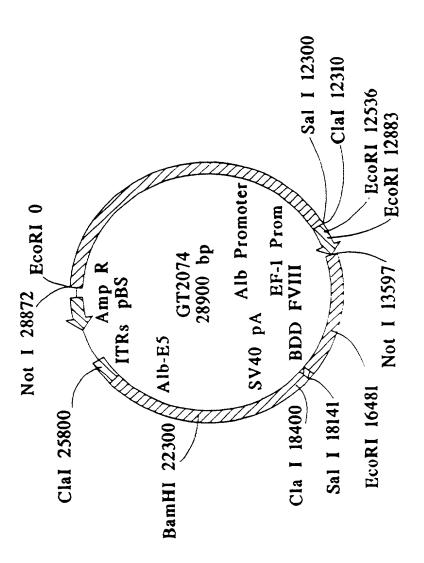
PASSAGE

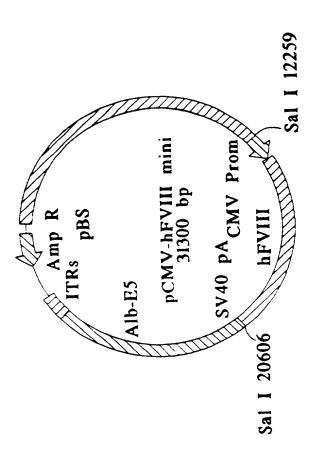


### FIGURE 33 MiniAdFVIII-Mediated Expression of hFVIII in Mice

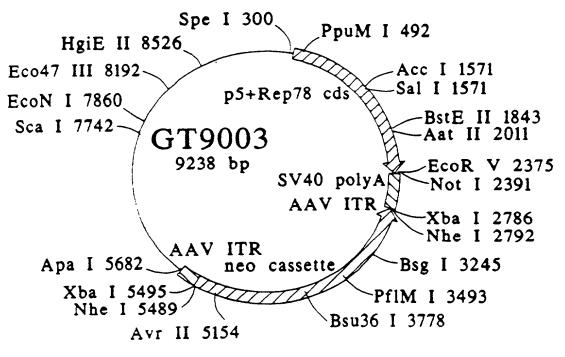




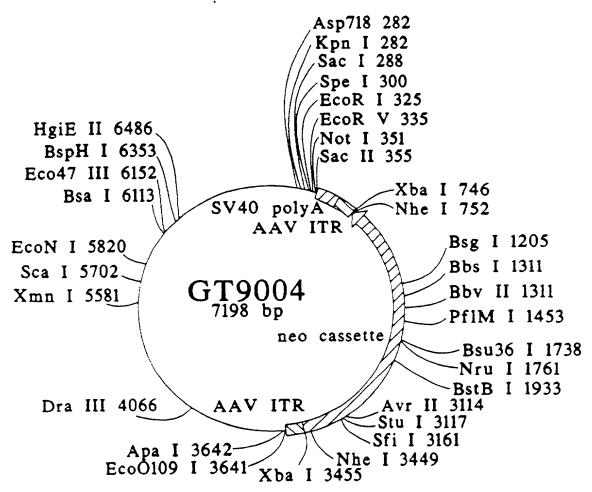




#### FIGURE 36A



### FIGURE 36B



### FIGURE 36C

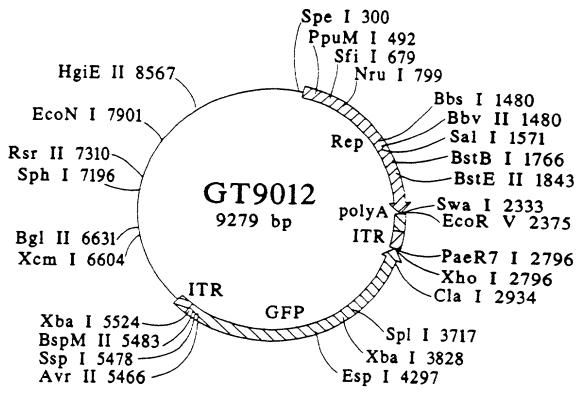


FIGURE 36D

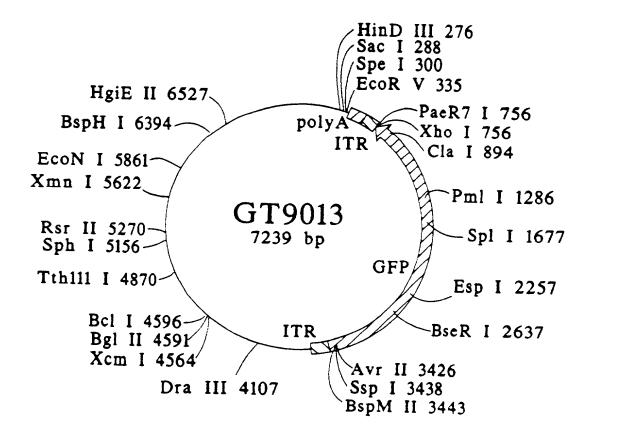
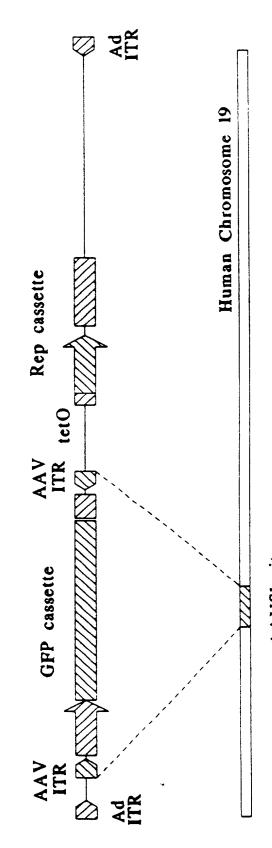
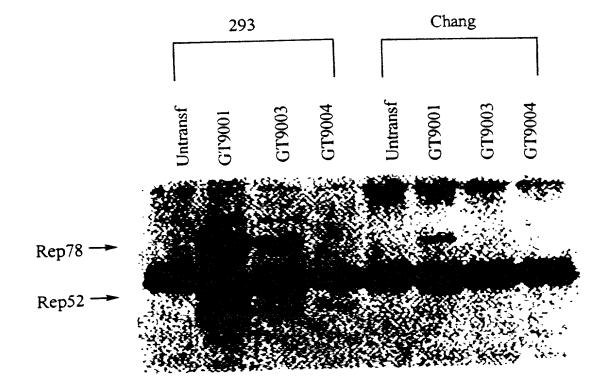


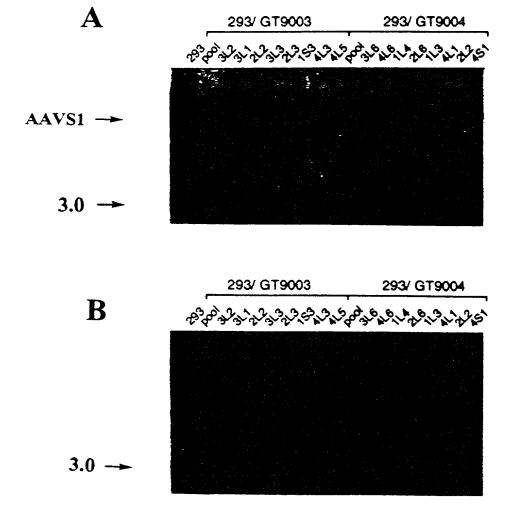
FIGURE 37

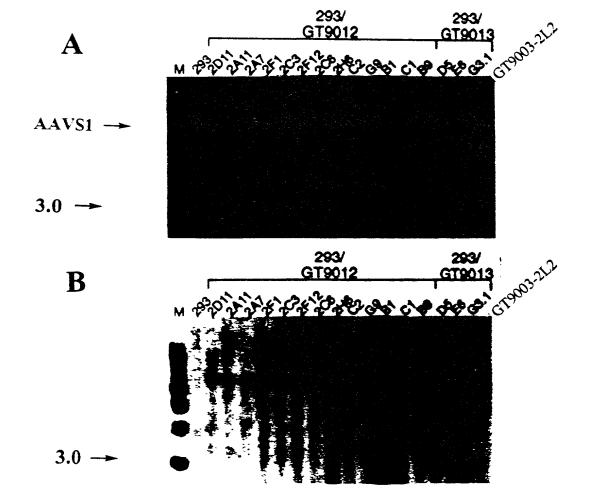


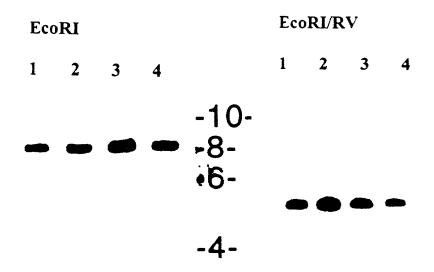
AAVS1 site



-







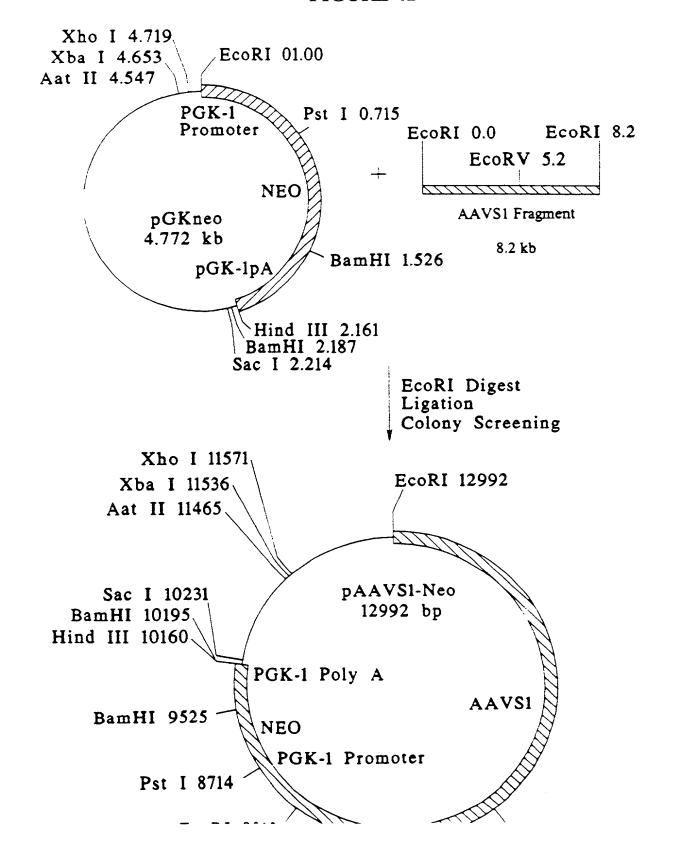


FIGURE 43

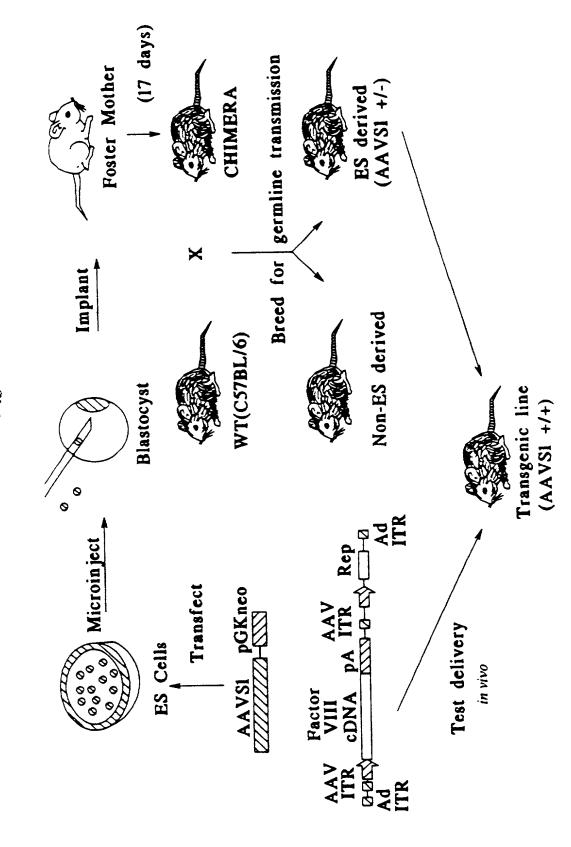
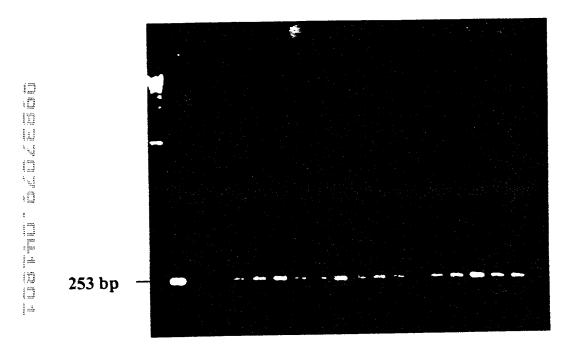
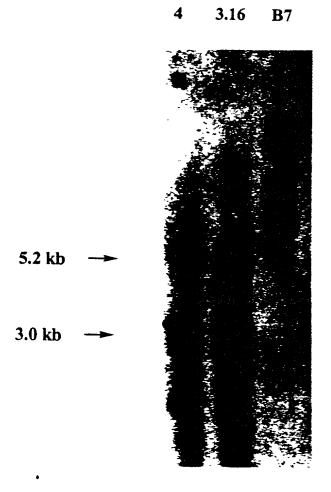
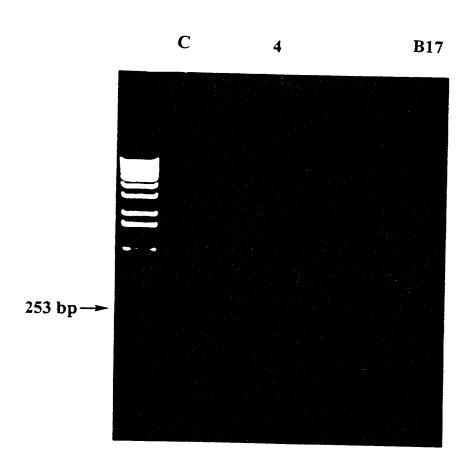
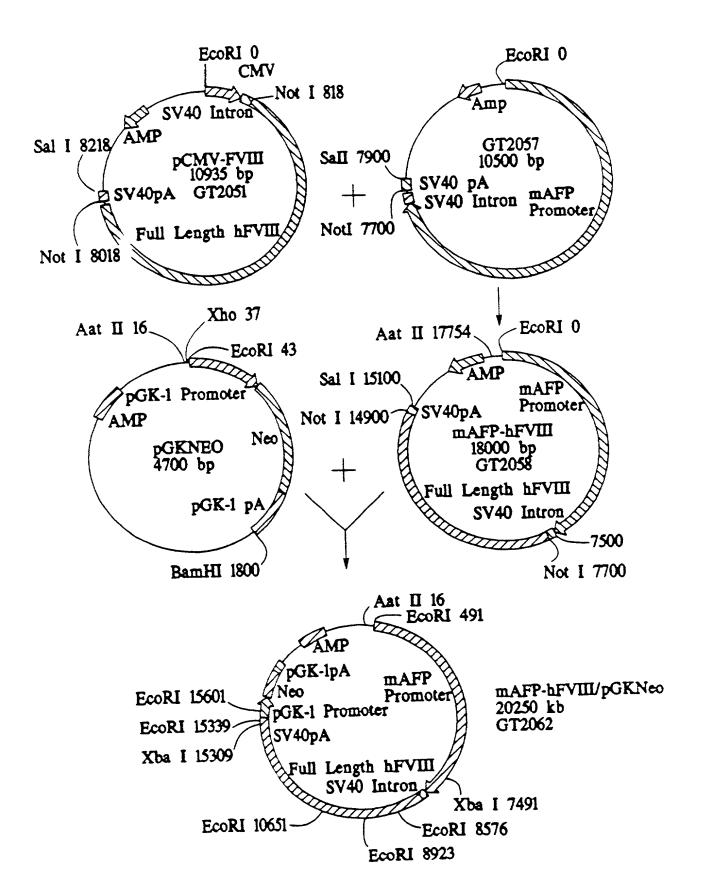


FIGURE 44









## ES 19 22 23 33

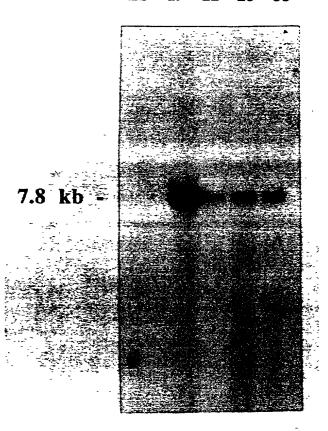


Fig. 10

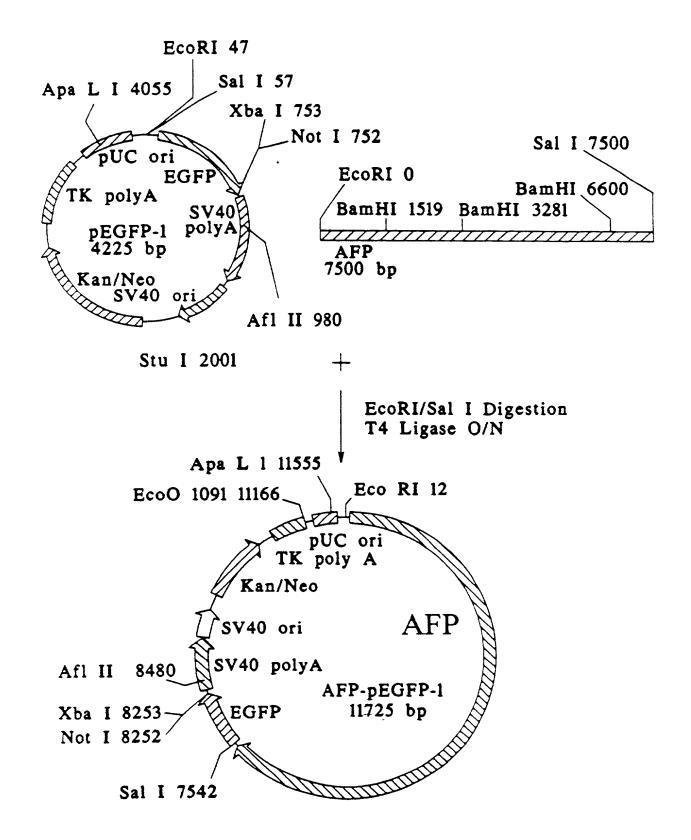
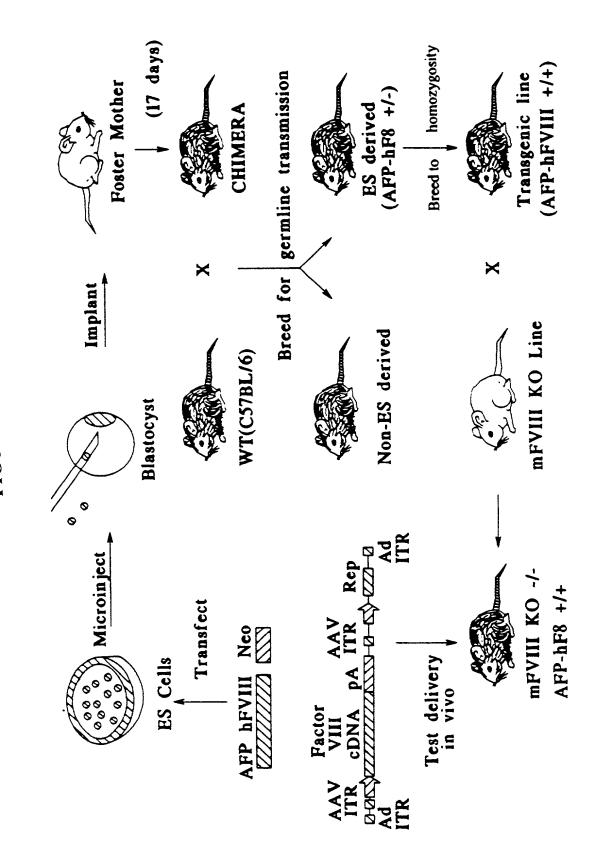


FIGURE 50



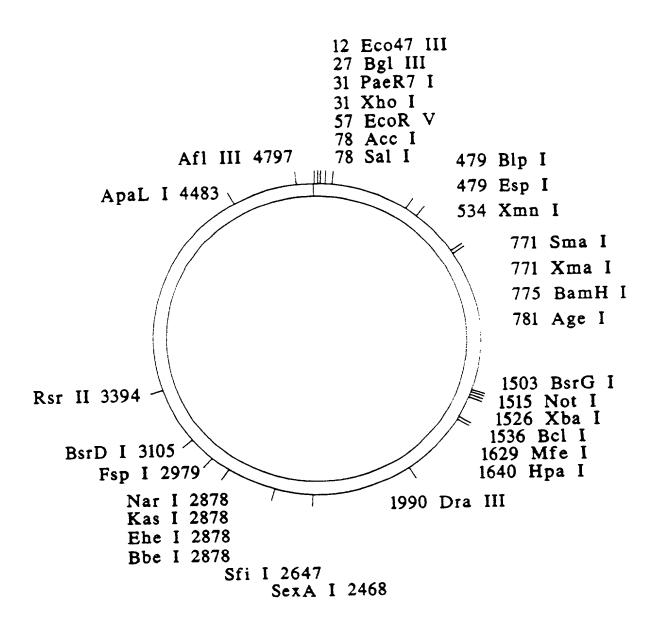
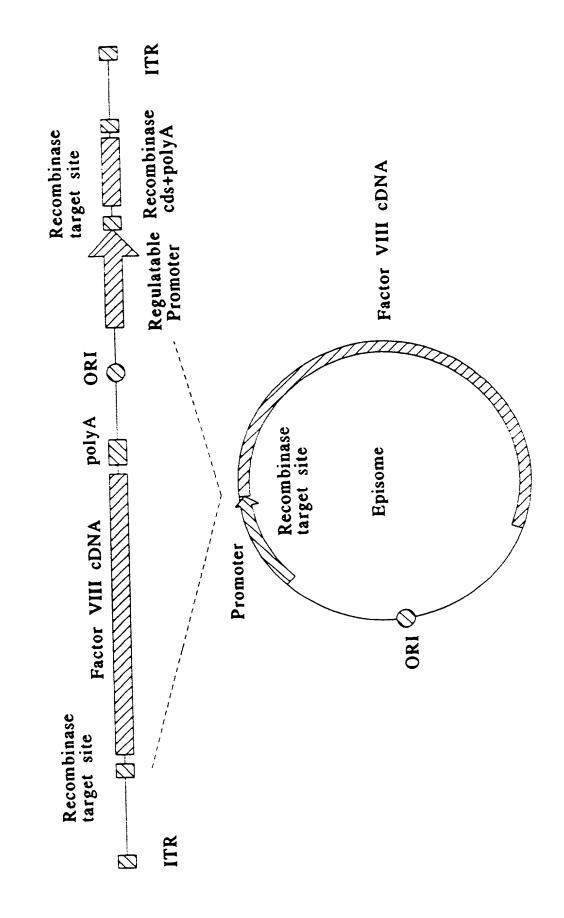


FIGURE 52



ITR		pA	рĄ	рĄ	pA
Super Ad Vector	Human AFP genome	G-GFP	Human IL2	Human IL7	Human IL12 p35 IRES Human IL12 p40 PA
	Humar	IRES	F IRES	IRES	35 IRES
	assette 4	Human P53	Human GM-CSF	Human B7	ıman IL12 p
Super A	Cassette 3 Cassette 4	Promoter Hu	omoter Hı	Promoter H	omoter H1
	Cassette 2	CMV P	EF Pr	SV 40	TK Pr
	Cassette 1 Cassette	Cassette 1	Cassette 2	Cassette 3	Cassette 4
TT 🛛	S	J			

